UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
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NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *27 July 2009*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-29* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-29* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *9/11/07 and 10/10/03* is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All   b) ☐ Some *   c) ☐ None of:

         1. ☐ Certified copies of the priority documents have been received.

         2. ☐ Certified copies of the priority documents have been received in Application No. _____.

         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which

forms the basis for all obviousness rejections set forth in this

Office action:

> (a) A patent may not be obtained though the invention is not identically
> disclosed or described as set forth in section 102 of this title, if the
> differences between the subject matter sought to be patented and the prior
> art are such that the subject matter as a whole would have been obvious at
> the time the invention was made to a person having ordinary skill in the
> art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

2.   Claims 1-8, 11, 12-18, 21-29 rejected under 35

U.S.C. 103(a) as being unpatentable over Alriksson (US

6,977,938) in view of Dolganow (US 2006/0123110) and McAllister

(US 2001/0010681) and IEEE 100 Dictionary.

        Regarding claims 1, 14, 24, 27, and 28 Alriksson teaches a

method of routing packets from a wireless communications

terminal (mobile networks, source routing, col. 3 lines 3-6).

Note, in source routing, the route is chosen at the terminal.

        Although Alriksson teaches wireless links (mobile

networks), the reference is silent on receiving, via a

respective wireless link from at least one of a plurality of

wireless access nodes forming a network, network information

relating to links between nodes.

Dolganow teaches receiving, via a respective link from at least one of a plurality of access nodes forming a network, network information relating to links between nodes (advertising available resource information, source routing protocol uses available resource advertisements for identifying a path, abstract, resource information, available bandwidth, [0033]).

Alriksson is silent on selecting a route via the network for packets from the terminal / 'source node' in dependence upon the network information and supplying packets with information relating to the selected route.

Dolganow teaches selecting a route via the network for packets from the terminal in dependence upon the network information and supplying packets with information relating to the selected route (source routing protocol uses the available resource advertisement for identifying a path, abstract, path selected by the source node, [0037], source node uses these metrics to choose the route, [0048]).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of Alriksson by receiving, via a respective wireless link from at least one of a

plurality of wireless access nodes forming a network, network

information relating to links between nodes, selecting a route

via the network for packets from the terminal / 'source node' in

dependence upon the network information, and supplying packets

with information relating to the selected route, as suggested by

Dolganow. This modification can be performed by transmitting

available resource advertisement messages as show by Dolganow.

This modification would benefit the system by ensuring the

terminals / 'source nodes' choose a route based upon the current

available bandwidth between the links.

     The combination is silent on selecting a route in

dependence upon information dependent upon wireless

communications between the terminal and at least one of the

nodes.

     McAllister teaches selecting a route in dependence upon

information dependent upon communications between the terminal /

'source node' and at least one of the nodes (link cost, [0007]).

     Therefore it would have been obvious to one of ordinary

skill in the art, to modify the system of the combination by

selecting a route in dependence upon information dependent upon

communications between the terminal / 'source node' and at least
one of the nodes, as shown by McAllister. This modification
would benefit the system by ensuring that the chose route is
affordable to the end user.

Although the combination teaches selecting a route from a
'source node', the combination is silent on selecting a route
from the terminal.

Like the combination, IEEE 100 Dictionary teaches source
routing. Furthermore, the reference teaches selecting a route
from the terminal (transmitter must know the route to the
destination, capability of the source to specify the path).

Therefore it would have been obvious to one of ordinary
skill in the art, to modify the system of the combination by
selecting a route from the terminal, as shown by IEEE 100
Dictionary. This modification can be performed according to the
teachings having the network also send the routing information
to the terminals as well as the nodes. This modification would
benefit the system in the case wherein the terminal is connected
to a plurality of source nodes and the terminal decides which
source node is optimal for routing.

Regarding claim 2, the terminal, monitoring a status of the
selected route (Dolganow: source routing protocol uses the
available resource advertisement for identifying a path,
abstract).

Regarding claim 3, in the terminal, receiving and
monitoring network information to determine a status of the
selected route and, selectively in dependence upon the
determined status, selecting a new route via the network for
packets from the terminal (Dolganow: source routing protocol
uses the available resource advertisement for identifying a
path, abstract).

Regarding claims 4 and 16, selecting a route including
wireless communications between the terminal and a different one
of the nodes (Alriksson: mobile networks, source routing, col. 3
lines 3-6).

Regarding claims 5, 6, the links between the nodes comprise wireless communications links (Alriksson: mobile networks, source routing, col. 3 lines 3-6).

Regarding claims 7, 17, 21, and 23, in addition to the limitations already addressed, the network information comprises Quality of Service parameters (McAllister: quality of service, [0007]).

Regarding claims 8 and 18, network information comprises an available bandwidth for each link between nodes in at least a part of the network (Dolganow: resource information, available bandwidth, [0033]).

Regarding claims 11, 12, 22, 25, and 29, a wireless communications terminal arranged for operation in accordance with the method of claim 4 (Alriksson: mobile networks, source routing, col. 3 lines 3-6).

Regarding claims 13 and 26, a plurality of wireless access nodes, a plurality of links between nodes for packet

communications in the network, and at least one wireless

communications terminal as claimed in claims 12, 25 for wireless

communications with the wireless access nodes, the wireless

access nodes being arranged for supplying to the terminal said

network information relating to links between the nodes

(Alriksson: mobile networks, source routing, col. 3 lines 3-6).

Regarding claim 15, in the terminal, monitoring network

information to determine a status of the selected route and,

selectively in dependence upon the detected status, selecting a

new route via the network for packets from the terminal

(Dolganow: advertising available resource information, source

routing protocol uses available resource advertisements for

identifying a path, abstract, resource information, available

bandwidth, [0033]).

3.   Claims 9 and 19 rejected under 35 U.S.C. 103(a) as being

unpatentable over the combination of Alriksson, Dolganow,

McAllister, and IEEE 100 Dictionary as applied to claims 6 and

14 above, and further in view of Miernik (US 7,155,215).

Although the combination teaches network information, the combination is silent on network information comprises a current delay for each link between nodes in at least a part of the network.

Miernik teaches the network information / QoS, comprises a current delay for each link between nodes in at least a part of the network (QoS, delays, connections).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of the combination by incorporating a link delay component in determining the QoS for each route, as suggested by Miernik. This modification can be performed in software. This modification would benefit the system since link delay is an integral determinant in the QoS for data being transmitted over a network.

4.   Claims 10 and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Alriksson, Dolganow, McAllister, and IEEE 100 Dictionary as applied to claims 6 and 14 above, and further in view of Seguin (US 7,206,295).

Although the combination teaches network information, the combination is silent on network information comprises an error

rate for each link between nodes in at least a part of the

network.

Sequin teaches QoS as a function of the error rate (col. 4

lines 25-28).

Therefore it would have been obvious to one of ordinary

skill in the art, to modify the system of the combination by

incorporating an error rate component in determining the QoS for

each route, as suggested by Sequin. This modification can be

performed in software. This modification would benefit the

system since the error rate is an integral determinant in the

QoS for data being transmitted over a network.

Response to Arguments

Applicant's arguments filed 7/27/09 have been fully

considered but they are not persuasive. Applicant's core

argument is nothing in the IEEE 100 Dictionary definition of

source routing would lead one skilled in the art to conclude

source routing is performed by a wireless communications

terminal (pg. 7 last paragraph). As stated by the Applicant, the

Examiner has equated the terms "transmitter", "station" and

"source" with the wireless communications terminal of the

applicant. The Examiner disagrees with the Applicant's

contention, "source routing as defined in the IEEE 100
Dictionary was not intended to include end users, Originating
Parties, or wireless communication terminals, as conventional
understanding of the time of publication of the IEEE 100
Dictionary was that "source routing" was performed by nodes in
the network, not end users, Originating Parties, or wireless
communication terminals". Examiner submits Ferguson (US
5,802,056 fig. 1A, 1B, 2, col. 1 lines 37-43) as further
evidence that source routing is intended to include end users,
Originating Parties, or wireless communication terminals.

Conclusion

5.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the
extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action
is set to expire THREE MONTHS from the mailing date of this
action. In the event a first reply is filed within TWO MONTHS
of the mailing date of this final action and the advisory action
is not mailed until after the end of the THREE-MONTH shortened
statutory period, then the shortened statutory period will
expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated

from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than

SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier

communications from the examiner should be directed to RONALD

ABELSON whose telephone number is (571)272-3165. The examiner

can normally be reached on M-F.

If attempts to reach the examiner by telephone are

unsuccessful, the examiner's supervisor, Ayaz Sheikh can be

reached on (571) 272-3795. The fax phone number for the

organization where this application or proceeding is assigned is

571-273-8300.

Information regarding the status of an application may be

obtained from the Patent Application Information Retrieval

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access to the automated information system, call 800-786-9199

(IN USA OR CANADA) or 571-272-1000.

                                        Ronald Abelson
                                        Primary Examiner
                                        Art Unit 2416

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/Ronald Abelson/
Primary Examiner, Art Unit 2416